

PIRATA References

Peer-reviewed

2008

- Bourlès, B., and Coauthors, 2008: The PIRATA Program: History, Accomplishments, and Future Directions. *Bull. Amer. Meteorol. Soc.*, accepted.
- Brandt, P., V. Hormann, B. Bourlès, J. Fischer, F. A. Schott, L. Stramma and M. Dengler, 2008: Oxygen tongues and zonal currents in the equatorial Atlantic. *J. Geophys. Res.*, **113**, C04012, doi:10.1029/2007JC004435.
- Foltz, G.R., and M.J. McPhaden, 2008: Impact of Saharan dust on tropical North Atlantic SST. *J. Climate*, in press.
- Han, W., P.J. Webster, J.L. Lin, W.T. Liu, R. Fu, D. Yuan, and A. Hu, 2008: Dynamics of Intraseasonal Sea Level and Thermocline Variability in the Equatorial Atlantic during 2002–03. *J. Phys. Oceanogr.*, *38*, 945–967.
- Lebel, T., and Coauthors, 2008: The AMMA field campaigns: Multiscale and multidisciplinary observations in the West African region. *Annales Geophys.*, submitted.
- Lefèvre, N., A. Guillot, L. Beaumont, and T. Ganguly, 2008: Variability of fCO₂ in the Eastern Tropical Atlantic from a moored buoy. *J. Geophys. Res.*, **113**, C01015, doi: 10.1029/2007JC004146.
- Urbano, D. F., R. A. F. De Almeida, and P. Nobre, 2008: Equatorial Undercurrent and North Equatorial Counter-current at 38°W: A new perspective from direct velocity data, *J. Geophys. Res.*, **113**, C04041, doi:10.1029/2007JC004215.
- von Schuckmann, K., P. Brandt, C. Eden, 2008: Generation of Tropical Instability Waves in the Atlantic Ocean, *J. Geophys. Res.*, accepted Mar. 2008.

2007

- Balmaseda, M.A., D.P. Dee, A.P. Vidard, & D.L.T. Anderson, 2007: A multivariate treatment of bias for sequential data assimilation: Application to the Tropical Oceans. *Q. J. Roy. Meteor. Soc.*, **133**(622), 167-179.
- Clayson, C. A., and D. Weitlich, 2007: Variability of tropical diurnal sea surface temperature. *J. Climate*, **20**, 334–352.
- Etienne, H., and M. Benkiran, 2007: Multivariate assimilation in Mercator project: New statistical parameters from forecast error estimation. *J. Mar. Sys.*, **65**(1-4), 430-449.
- Vidard, A., D. L. T. Anderson, and M. Balmaseda, 2007: Impact of ocean observation systems on ocean analysis and seasonal forecasts. *Mon. Weather Rev.*, **135**(2), 409-429.
- Yu, L., R.A. Weller, 2007: Objectively Analyzed air-sea heat Fluxes (OAFlux) for the global ice-free oceans. *Bull. Amer. Meteor. Soc.*, **88**(4), 527-539.

2006

- Arhan, M., A.M. Tréguier, B. Bourlès, and S. Michel, 2006: Diagnosing the annual cycle of the equatorial undercurrent in the Atlantic ocean from a general circulation model. *J. Phys. Oceanogr.*, **36**, 1502-1522.
- Bunge L., C. Provost, J. Lilly, M. D'Orgeville, A. Kartavtseff and J.L. Melice, 2006: Structure of the horizontal velocity in the first 1600 m of the water column at the equator in the Atlantic at 10 W, *J.Phys..Oceanogr.*, **36**, 1287-1304.

- Brandt, P., F.A. Schott, C. Provost, A. Kartavtseff, V. Hormann, B. Bourlès, and J. Fischer, 2006: Circulation in the central equatorial Atlantic: Mean and intraseasonal to seasonal variability. *Geophys. Res. Lett.*, **33**(7), doi:10.1029/2005GL025498.
- Chang, P., T. Yamagata, P. Schopf, S.K. Behera, J. Carton, W.E. Kessler, G. Meyers, T. Qu, F. Schott, S. Shetye, and S.P. Xie, 2006: Climate fluctuations of Tropical Coupled Systems – The Role of Ocean Dynamics. *J. Climate (Special Section)*, **19**, 5122-5174.
- Foltz, G.R., and M.J. McPhaden, 2006: Unusually warm sea surface temperatures in the tropical North Atlantic during 2005. *Geophys. Res. Lett.*, **33**, L19703, doi:10.1029/2006GL027394.
- Okumura, Y., and S.P. Xie, 2006: Some Overlooked Features of Tropical Atlantic Climate Leading to a New Niño-Like Phenomenon. *J. Climate*, **19**, 5859–5874.
- Peter, A.C., M. Le Henaff, Y. du Penhoat, C.E. Menkes, F. Marin, J. Vialard, G. Caniaux, and A. Lazar, 2006: A model study of the seasonal mixed layer heat budget in the equatorial Atlantic. *J. Geophys. Res.*, **111**, C06014, doi:10.1029/2005JC003157.
- Siqueira, L. S. P. and P. Nobre, 2006: Tropical Atlantic Sea Surface Temperature and heat flux simulations in a coupled GCM. *Geophys. Res. Lett.*, **33**, L15708, doi: 10.1029/2006GL026528.
- Stockdale, T.N., M.A. Balmaseda, and A.P. Vidard, 2006: Tropical Atlantic SST prediction with coupled ocean-atmosphere GCMs. *J. Climate*, **19**(23), 6047-6061.
- Yu, L., X. Jin, and R.A. Weller, 2006: Role of net surface heat flux in seasonal variations of sea surface temperature in the tropical Atlantic Ocean. *J. Climate*, **19**, 6153–6169.

2005

- Brut, A., A. Butet, P. Durand, G. Caniaux, and S. Planton, 2005: Estimations of turbulent air-sea fluxes and their parameterizations including airflow distortion corrections from the EQUALANT99 dataset, *Quart. J. Roy. Meteor. Soc.*, **131**, 2497–2538.
- Clauzet G., I. Wainer, et J. Servain, 2005: Times-scales of variability from the high frequency PIRATA data revealed by wavelet analysis. *Braz. J. Meteorol.*, **20**(1), 43-58.
- Delcroix, T., M.J. McPhaden, A. Dessier, and Y. Gouriou, 2005: Time and space scales for sea surface salinity in the tropical oceans. *Deep-Sea Res.*, **52**, 787-813.
- Durand B., Servain J., Laurent H., and Machado L. A., 2005: Tropical Atlantic moisture flux, Convection over Northeastern Brazil, and pertinence of the PIRATA network, *J. Climate*, **18**(12), 2093-2101.
- Enfield, D. and S. Lee, 2005: The heat balance of the western hemisphere warm pool. *J. Climate*, **18**, 2662-2681.
- Foltz, G.R., and M.J. McPhaden, 2005: Mixed layer heat balance on intraseasonal time scales in the northwestern tropical Atlantic Ocean. *J. Climate*, **18**, 4168-4184.
- Giarolla, E., P. Nobre, M. Malagutti, and P. Pezzi, The Atlantic Equatorial Undercurrent: PIRATA observations and simulations with GFDL Modular Ocean Model at CPTEC, 2005: *Geophys. Res. Lett.*, **32**, L10617, doi:10.1029/2004GL022206.
- Grodsky, S., J. Carton, C. Provost, J. Servain, J. Lorenzzetti, and M.J. McPhaden, 2005: Tropical instability waves at 0N, 23W in the Atlantic: A case study using Pilot Research Moored Array in the Tropical Atlantic (PIRATA) mooring data. *J. Geophys. Res.*, **110**, C08010, doi: 10.1029/2005JC00294.
- Lumpkin R, and Z. Garraffo, 2005: Evaluating the Decomposition of Tropical Atlantic Drifter Observations. *J. Atmos. and Oceanic Technol.* **22**(9), 1403-1415.

2004

- Dourado, M., and G. Caniaux, 2004: One-dimensional modelling of the oceanic boundary layer using PIRATA data at 10S, 10W. *Revista Brasileira de Meteorologia*, **19**(2), 217-226.

- Foltz, G.R., S.A. Grodsky, J.A. Carton, and M.J. McPhaden, 2004: Seasonal salt budget of the northwestern tropical Atlantic Ocean along 38°W. *J. Geophys. Res.*, **109**, C03052, doi: 10.1029/2003JC002111.
- Foltz G. R., M. J. McPhaden, 2004: The 30-70 day oscillations in the tropical Atlantic, *Geophys. Res. Lett.*, **31**, L15205, doi:10.1029/2004GL020023.
- Gentemann, C.L., F.J. Wentz, C.A. Mears, and D.K. Smith, 2004: In situ validation of Tropical Rainfall Measuring Mission microwave sea surface temperatures. *J. Geophys. Res.*, **109**, C04021, doi:10.1029/2003JC002092.
- Jochum, M., Malanotte-Rizzoli, P., and Busalacchi, A. J, 2004: Tropical instability waves in the Atlantic Ocean. *Ocean Modelling*, **7**, 145–163.
- Provost, C., S. Arnault, N. Chouaib, A. Kartavtseff, L. Bunge, and E. Sultan, 2004: Topex-Poseidon and JASON equatorial sea surface slope anomaly in the Atlantic in 2002: comparison with wind and current measurements at 23°W. *Mar. Geodesy*, **27**, 31-45.
- Serra, Y.L., and M.J. McPhaden, 2004: In Situ Observations of Diurnal Variability in Rainfall over the Tropical Pacific and Atlantic Oceans. *J. Climate*, **17**(18), 3496–3509.
- Vauclair, F., du Penhoat, Y., Reverdin, G., 2004: Heat and Mass Budgets of the Warm Upper Layer of the Tropical Atlantic Ocean in 1979–99. *J. Phys. Oceanogr.*, **34**(4), 903–919.
- Yu, L. S., R. A. Weller, and B. M. Sun, 2004: Mean and variability of the WHOI daily latent and sensible heat fluxes at in situ flux measurement sites in the Atlantic Ocean. *J. Climate*, **17**(11), 2096-2118.
- Yu, L. S., R. A. Weller, and B. M. Sun, 2004: Improving Latent and Sensible Heat Flux Estimates for the Atlantic Ocean (1988–99) by a Synthesis Approach. *J. Climate*, **17**(2), 373–393.

2003

- Foltz, G.R., S.A. Grodsky, J.A. Carton, and M.J. McPhaden, 2003: Seasonal mixed layer heat budget of the tropical Atlantic Ocean. *J. Geophys. Res.*, **108**(C5), doi: 10.1029/2002JC001584.
- Garzoli, S. L., and J. Servain, 2003: CLIVAR workshop on tropical Atlantic variability, *Geophys. Res. Lett.*, **30**(5), 8001, doi:10.1029/2002GL016823.
- Molinari, R. L., S. Bauer, D. Snowden, G. C. Johnson, B. Bourlès, Y. Gouriou, and H. Mercier, 2003: A comparison of kinematic evidence for tropical cells in the Atlantic and Pacific oceans. In *Interhemispheric Water Exchange in the Atlantic Ocean*, eds. G. J. Goni and P. Manalotte-Rizzoli, Elsevier Oceanography Series, **68**, 269-286.
- Schott, F.A., M. Dengler, P. Brandt, K. Affler, J. Fischer, B. Bourlès, Y. Gouriou, R.L. Molinari, and M. Rhein, 2003: The zonal currents and transports at 35°W in the tropical Atlantic. *Geophys. Res. Lett.* **30**(7), 1349, doi:10.1029/2002GL016849.
- Serra, Y.L., and M.J. McPhaden, 2003: Multiple time- and space-scale comparisons of ATLAS buoy rain gauge measurements with TRMM satellite precipitation measurements. *J. Applied Meteor.*, **42**(8), 1045-1059.
- Servain, J., G. Clauzet, and I.C. Wainer, 2003: Modes of tropical Atlantic climate variability observed by PIRATA, *Geophys. Res. Lett.*, **30**(5), 8003, doi:10.1029/2002GL01512.
- Sun, B., L. Yu, and R.A. Weller, 2003: Comparisons of surface meteorology and turbulent heat fluxes over the Atlantic: NWP model analyses versus moored buoy observations. *J. Climate*, **16**, 679-695.
- Vianna, M. L., and V. V. de Menezes, 2003: A seasonal and interannual study of the western equatorial Atlantic upper thermocline circulation variabilty. In *Interhemispheric Water Exchange in the Atlantic Ocean*, eds. G. J. Goni and P. Manalotte-Rizzoli, Elsevier Oceanography Series, **68**, 137-173.

Wainer, I., G. Clauzet, J. Servain, and J. Soares, 2003: Time scales of upper ocean temperature variability inferred from the PIRATA data (1997-2000). *Geophys. Res. Lett.*, **30**(5), 8004, doi:10.1029/2002GL015147.

Weill, A., and Coauthors, 2003: Toward a Better Determination of Turbulent Air–Sea Fluxes from Several Experiments. *J. Climate.*, **16**(4), 600–618.

2002

Bourlès, B., M. d'Orgeville, G. Eldin, Y. Gouriou, R. Chuchla, Y. DuPenhoat, and S. Arnault, 2002: On the evolution of the thermocline and subthermocline eastward currents in the Equatorial Atlantic. *Geophys. Res. Lett.*, **29**(16), doi:10.1029/2002GL015098, 2002.

Ebuchi N., H.C. Graber, M.J. Caruso, 2002: Evaluation of wind vectors observed by QuikSCAT / SeaWinds using ocean buoy data. *J. Atmos. Ocean. Technol.*, **19**, 2049–2062.

Troccoli, A., and Coauthors, 2002: Salinity Adjustments in the Presence of Temperature Data Assimilation. *Mon. Wea. Rev.*, **130**(1), 89–102.

2001

- Belyaev, K. P., C. A. S. Tanajura, and J. J. O'Brien, 2001: A data assimilation method used with an ocean circulation model and its application to the tropical Atlantic, *Applied Mathematical Modeling*, **25**(8), 655-670.
- Bentamy, A., K.B. Katsaros, W. Drennan, and E.B. Forde, 2001: Daily surface wind fields produced by merged satellite data. In Gas Transfer at Water Surfaces, E.S. Saltzman, M. Donelan, W. Drennan, and R. Wanninkhof (eds.). *AGU Geophysical Monograph Series*, Volume **127** (ISBN 0875909868), 343-349.
- Serra, Y.L., P. A'Hearn, H.P. Freitag, and M.J. McPhaden, 2001: ATLAS Self-Siphoning Rain Gauge Error Estimates. *J. Atmosph. Ocean. Technol.*: **18**(12), 1989–2002.
- Vauclair F., Y. du Penhoat, 2001: Interannual variability of the upper layer of the tropical Atlantic ocean from in-situ data between 1979 and 1999, *Climate. Dyn.*, **17**, 527-546.

2000

- Segschneider, J., M. Balmaseda, and D.L.T Anderson, 2000: Anomalous temperature and salinity variations in the tropical Atlantic: possible causes and implications for the use of altimeter data. *Geophys. Res. Lett.*, **27**(15) , 2281.
- Servain J., I. Wainer, H.L. Ayina, and H. Roquet, 2000: The relationship between the simulated climatic variability modes of the tropical Atlantic. *Int. J. Climatol.*, **20**, 939-953.
- Wentz, F.J., C. Gentemann, D. Smith, and D. Chelton, 2000: Satellite Measurements of Sea Surface Temperature Through Clouds. *Science*, **288**: 847-850, 5 May.

1999

- Pailler, K., B. Bourlès, and Y. Gouriou, 1999: The barrier layer in the western tropical Atlantic Ocean. *Geophys. Res. Lett.*, **26**(14), 2069-2072.
- Servain, J., I. Wainer, J. P. McCreary, and A. Dessier, 1999: Relationship between the equatorial and meridional modes of climatic variability in the tropical Atlantic, *Geophys. Res. Lett.*, **26**(4), 485-488, doi 10.1029/1999GL900014.

1998

- Hackert, E. C., R. N. Miller, and A. T. Busalacchi, 1998: An optimized design for a moored instrument array in the tropical Atlantic Ocean. *J. Geophys. Res.*, **103**(C4), 7491-7509.
- Servain J., A. Busalacchi, M.J. McPhaden, A.D. Moura, G. Reverdin, M. Vianna, and S. Zebiak, 1998: A Pilot Research Moored Array in the Tropical Atlantic (PIRATA). *Bull. Amer. Meteorol. Soc.*, **79**, 2019-2031.

Other (Reports, proceedings, etc.)

2008

2007

- Bourlès, B., P. Brandt, G. Caniaux, M. Dengler, Y. Gouriou, E. Key, R. Lumpkin, F. Marin, R.L. Molinari, and C. Schmid, 2007: African Monsoon Multidisciplinary Analysis (AMMA): Special measurements in the tropical Atlantic. *CLIVAR Exchanges*, **41**(12), 2, 7-9.
- Lau, K. M., and J. M. Kim, 2007: How nature foiled the 2006 hurricane forecasts. *EOS Trans. AGU*, **88**, 105-107.
- Lebel, T., D. J. Parker, B. Bourlès, A. Diedhiou, A. Gaye, J. Polcher, J.-L. Redelsperger, and C. D. Thorncroft, 2007: AMMA field campaigns in 2005 and 2006. *GEWEX News*, **17**(1).

2006

- Ayina, L.H., A. Bentamy, 2006: "Une approche pour améliorer les flux turbulents estimés à partir des mesures satellite", *Submitted to electronic review «Revue de Recherche et d'application en télédétection » (<http://www.teledetection.net/>)*.
- Bourlès B., et al., 2006: Recueil de données Météo-Océaniques récoltées durant la campagne PIRATA FR12, *Doc. Scient. et Techn. du Centre IRD de Bretagne, n°2006-01, en cours de finalisation*.
- Bunge, L., C. Provost, A. Kartavtseff and B. Bourlès, 2006: Horizontal velocity variability at 10°W and 23°W on the equator, *AGU General Assembly, Hawaï-USA*.
- Lumpkin, R., R.L. Molinari, and M. JMcPhaden, 2006: A Northeast Extension of the PIRATA Array. *White Document, AOML/NOAA, Miami, FL, USA*.
- Morris, V., P. Clemente-Colón, N.R. Nalli, E. Joseph, R.A. Armstrong, Y. Detrés, M.D. Goldberg, P.J. Minnett and R. Lumpkin, 2006: Measuring Trans-Atlantic Aerosol Transport from Africa. *EOS Trans . AGU*, **87**(50).
- Nobre, P., 2006: The PIRATA South Western Extension. *8th International Conference on Southern Hemisphere Meteorology and Oceanography. Session: Addressing gaps in SH observing systems. Foz do Iguaçu, Brazil*.
- Sato, O. T.; Polito, P. S., 2006: Long-term trend in the oceanic heat storage of the South Atlantic estimated from altimeter and PIRATA data. *8th International Conference on Southern Hemisphere Meteorology and Oceanography. Session: Role of the SH on oceans and climate. Foz do Iguaçu, Brazil*.
- Urbano, D. F. and P. Nobre, 2006: Velocity field at the PIRATA sites: Model output vs. observations. *8th International Conference on Southern Hemisphere Meteorology and Oceanography. Session: Role of the SH on oceans and climate. Foz do Iguaçu, Brazil*.

2005

- Arhan, M., A. M. Treguier, B. Bourlès, S. Michel, 2005: Diagnosing the annual cycle of the Equatorial Undercurrent in the Atlantic Ocean from a General Circulation model ([EGU05-A-03458](#)), *EGU General Assembly, Vienna*.
- Balmaseda, M.A., D.P. Dee, A.P. Vidard, and D.L.T. Anderson, 2005: A Multivariate Treatment of Bias for Sequential Data Assimilation: Application to the Tropical Oceans. *ECMWF Tech Memorandum No 480*.
- Bidlot, J.R., 2005: Impact of using the actual anemometer height when assimilating DRIBU surface wind data. *ECMWF Memorandum Research Department*, 14pp.
- Bourlès, B, 2005: Environmental Research observatory: PIRATA, summary document, Report done for the French Commission Scientifique Océan Atmosphère (CSOA): 44pp.
- Caniaux, G., H. Giordani, B. Bourlès and Y. DuPenhoat, 2005: Air-sea interactions during the EGEE/AMMA experiment: necessary requierements, *Extended abstract for OSI SAF (Ocean and Sea Ice Satellite Application Facility) Workshop, Perros-Guirec, (France)*.
- Le Borgne, P., Gérard Legendre, Anne Marsouin, 2005: OSI SAF radiative fluxes, *Extended abstract for OSI SAF (Ocean and Sea Ice Satellite Application Facility) Workshop, Perros-Guirec, (France)*.
- Provost, C., N. Chouaib, A. Spadone, L. Bunge, S. Arnault, and E. Sultan, 2005: Interannual variability of the zonal sea surface slope in the equatorial Atlantic during the 1990s. *Advances in Space Res. (COSPAR publication)*, 37, 823-831.
- Vidard, A., D.L.T. Anderson, and M. Balmaseda, 2005: Impact of ocean observation systems on ocean analysis and seasonal forecasts. *ECMWF Tech Memorandum No 460*.

2004

- Busalacchi, A.J., R. Boscolo, B. Dickson, A. Piola, J. Servain, and N. Zeng, 2004: Climate observing system for the Atlantic sector. *CLIVAR Exchanges*, Vol. 9, N° 3, pp 8-11 +p16.
- Bourlès, B., J. Servain et S. Planton, 2004: l'ORE PIRATA, *colloque ORE du CNRS/INSU, Paris*, 15-16 Nov.
- Cousin, R., F. Hernandez, and Y. Du Penhoat, 2004: Apport du réseau de mouillages météo-océaniques PIRATA pour l'océanographie opérationnelle, *La lettre trimestrielle MERCATOR-OCEAN*, 15, 2-8, October.
- Durand B., L.H. Ayina, A. Bentamy et J. Servain, 2004: High resolution satellite-derived surface turbulent fluxes over the Atlantic Ocean. *XIII Congresso Brasileiro de Meteorologia. Fortaleza, Brazil*, Sept.
- Durand B., Servain J., Laurent H., and Machado L. A., 2004: Fluxo de calor latente no Atlântico tropical, convecção sobre o Nordeste e a rede PIRATA. *Extended Proceedings XIII Congresso Brasileiro de Meteorologia. Fortaleza, Brazil*, Sept.
- Johnson, M., et al., 2004: Ship Time Needs for PIRATA and the Tropical and South Atlantic Observing System: A Special Report by the Atlantic Observations Working Group (AOWG), November.
- Kartavtseff, Annie, 2004: Mouillage courantométrique PIRATA 10°W ; Mai 2003- Février 2004 ; Internal Report LODYC, n°2004-01, May.
- Nobre, P., E. Campos, P.S. Polito, O.T Sato, and J. Lorenzzetti (with contribution by A.Robertson, M.Vianna, J.Servain, and I.Wainer), 2004: PIRATA Western Extension Scientific Rational Report. *INPE/CPTEC Special Report, Cachoeira Paulista, SP, Brazil*.
- Rouault, M., and Coll., 2004: PIRATA South-Eastern Extension White Paper. *UFCT Special Report, Cape Town, SA*.
- Servain, J., 2004: PIRATA, Pirata et Mercator : Des bouées ancrées observent l'Atlantique tropical. Fiche Actualité MERCATOR (« Chroniques mercatoriennes »), 23 March.
- Servain J., 2004: Introduction of the Session “Scientific results from the PIRATA Program

- (1997-2004)”. *Joint American and Canadian Geophysical Unions meeting, Montreal, Canada*, May.
- Servain J., Hervé M., and B. Durand, 2004: A real-time diagnostic analysis of the PIRATA observations. *Joint American and Canadian Geophysical Unions meeting, Montreal, Canada*, May.
- Servain J., 2004: O Programa PIRATA: CAMISA-PIRATA, O programa PIRATA : Objetivos, Realisações, Perspectivas. *Extended Proceeding XIII Congresso Brasileiro de Meteorologia. Fortaleza, Brésil*, Sept.
- Servain J., B. Bourlès, et S. Planton, 2004: Le Programme PIRATA : Réalisations, Exploitation, Développement. *Recueil de Communications de l'Atelier Expérimentation et Instrumentation (AEI). Paris, France*, 6pp, March.
- Servain J., 2004: O Programa PIRATA: CAMISA-PIRATA, O programa PIRATA : Objetivos, Realisações, Perspectivas. *Extended Proceeding XIII Congresso Brasileiro de Meteorologia. Fortaleza, Brazil*, Sept.
- Servain J., Durand B., Ayina L.-H. and Bentamy A., 2004: High resolution satellite and PIRATA derived surface turbulent fluxes over the Atlantic Ocean. *Extended Proceeding XIII Congresso Brasileiro de Meteorologia. Fortaleza, Brazil*, Sept.
- Siqueira, L.S.P, and P.Nobre, 2004: Contrasting the errors in sea surface temperature and surface heat flux by a coupled GCM and its oceanic component, *XII Congresso Brasileiro de Meteorologia, Fortaleza, Brazil*, Sept.

2003

- Balmaseda, M.A., 2003: Ocean data assimilation for seasonal forecasts. *ECMWF Seminar Proceedings. Seminar on Recent developments in data assimilation for atmosphere and ocean, 8-12 September 2003*, 301-326.
- Bourlès, B., 2003: On the Gulf of Guinea and the West African Monsoon, *CLIVAR Exchanges Letters*, n°27, Vol. 8, n°2/3, *CLIVAR-Africa*, 15-16, Sept.
- Grelet J., Servain J., Lorenzzetti J. et Vianna M. (in collaboration with A. Kartavtseff, R. Chuchla et B. Bourlès, 2003: Recueil de données Météo-Océaniques durant les campagnes PIRATA : Années 1997-2003. *Publication IRD-Brest ; [Available at PIRATA web site]*).
- Kartavtseff A., 2003: Mouillages courantométriques PIRATA 10W et 23W. Dec 2001-Dec 2002. Internal Report LODYC n°2003-01.
- Peter, A.C., et Y. du Penhoat, 2003: Etude de la couche de mélange océanique et bilan de chaleur dans le Golfe de Guinée, *journées prospectives du PATOM, CIC de Météo France, Toulouse*. Dec.
- Provost C. et J. Servain, 2003: -ACI CLIMAT PIRATA– BILAN scientifique, technique et financier de la partie mouillages équatoriaux, Report done for the French ACI-Climat.
- Vera C. S., Hazeleger, W., Wainer, I., and Servain, J., 2003: Climate Variability in the South Atlantic Ocean. « White Document » prepared for the « Workshop SACOS : South Atlantic Climate Observing System », Angra dos Reis, RJ, Brazil, Feb.

2002

- Balmaseda, M.A., 2002: Dealing with Systematic error in ocean data assimilation. *ECMWF Workshop on the Role of the Upper Ocean in Medium and Extended Range Forecasting, 3-15 Nov 2002*.
- Bourlès, B., 2002: Atlantique Equatorial : des courants suivis à la trace..., *Fiches d'Actualités Scientifiques de l'IRD*, n°163, Oct. 2002.
- DuPenhoat, Y., N. Ferry, C. Maes, J.Merle, S. Arnault, collab.: L. Fleury, E. Greiner, M. Benkiran, A. Lazar, G. Eldin et B. Bourlès, 2002: Validation des systèmes MERCATOR en zone tropical: océans Pacifique et Atlantique, *Journées Mercator-Coriolis, LEGOS (France)*, Sept

2002.

- Marchand, P., and J. Servain, 2002: NOR-50: Fast research vessel for operational oceanography - Implementing PIRATA & Argo programs in the Tropical & South Atlantic in a practical, economic way. *Sea Technology*, **43**(6), 49-54.
- Michel S., and A.-M. Treguier, 2002: Sensitivity of the Equatorial Undercurrent to mixing parameterisations in the CLIPPER model. *Report IFREMER/DRO/LPO n°02-16*, 35pp.
- Servain J., 2002: The status and perspective of the PIRATA Program. A CLIVAR Workshop on the Dynamics and Predictability of the Atlantic ITCZ and its Regional Climatic Influences. A CLIVAR Workshop on the Dynamics and Predictability of the Atlantic ITCZ and its Regional Climatic Influences. IRI, Palisades, NY, USA, Sept 2002.

2001

- Ayina H. L., and J. Servain, 2001: Climate modulation in a general circulation model of the tropical Atlantic. *CLIVAR Tropical Atlantic Workshop, Paris, France*, Sept, 2001.
- Cariou S., J. Servain, R. Person, et Y. Roubaud, 2001: Study of the tuna behaviour by acoustic simulation. *CLIVAR Tropical Atlantic Workshop, Paris, France*, Sept 2001.
- Clauzet G., I. Wainer, et J. Servain, 2001: Time-scales of variability from the high-frequency PIRATA data (1997-2000). *Joint IAPSO/IABO Assembly: 2001 An Ocean Odyssey. Mar del Plata, Argentina*, Oct 2001.
- Michel, S., A-M. Treguier, R. Schopp, Y. Quilfen, A. Bentamy, 2001: Comparison of two Atlantic simulations forced by ECMWF and ERS wind climatologies, *CLIVAR workshop on Tropical Atlantic Variability, Paris*, Sept 2001.
- Servain, J. and J. Lorenzetti, 2001: PIRATA-8 Meeting Report. *CLIVAR-Exchanges No. 22, Newsletter of the CLIVAR Program, Vol. 6, No. 4*, Dec. 2001.
- Quilfen, Y., A. Bentamy, S. Michel, A-M. Treguier, R. Schopp, 2001: Impact of the wind from ERS satellites and from ECMWF reanalysis in the CLIPPER Atlantic model : first results, *AGU meeting on scatterometry, Los Angeles*, Dec 2001.

1999

- McPhaden M. J., P.Freitag, J.Servain and E. Josse, 1999: Effects of fishing activity on tropical moored buoy arrays. *Actes du colloque Caraïbe-Martinique "Pêche thonière et dispositifs de concentration de poissons"*, 15-19 octobre 1999. Edits. J.-Y. Le Gall, P. Cayré & M. Taquet. p. 154.
- Segschneider, J., M. Balmaseda, D. Anderson and O. Alves, 1999: On the risks of assimilating real time oceanic observations, limitations of a univariate assimilation scheme, and how to benefit from vandalism, *CLIVAR Exchanges*, No. **13**, Sept. 1999.
- Servain J., and the PIRATA SSC, 1999: The PIRATA program and a proposed expansion through the South East. *Proceedings of the 10th Southern African Marine Science Symposium (SAMSS 2000) Land, Sea and People in the New Millennium*, 22 to 26 November, 1999, *Wilderness, South Africa*, p 131.
- Vianna M.L., Servain J., and Busalacchi A.J., 1999: PIRATA: Recent results and future perspectives. *CLIVAR Exchanges*, Vol. 4, N° 3, 17- 24.
- Vianna M.L., Servain J., and Busalacchi A.J., 1999: The PIRATA Program: Monitoring Tropical Atlantic Waters. *Sea Technology*, Vol. 40, N° 10, 10-15.

1998

- Servain J., and M. Vianna, 1998: Pilot research moored array in the tropical Atlantic - PIRATA. Program Status Report in *TAO Implementation Panel Report of the Sixth Session, Reading, England, 4-6 November 1997*, GOOS Report No. 36, GCOS Report No. 43, ICPO Publication Series No. 13, p 10.

Servain J., and Group PIRATA, 1998: The PIRATA program: An extension of the TAO array in the Atlantic. *Conférence Internationale Abidjan'98 "Variabilité des Ressources en Afrique au XXème Siècle", Recueil des Posters, 16-19 novembre 1998, Abidjan, Côte d'Ivoire*, 157-161.

Servain J., 1998: PIRATA Status Report. *TAO Implementation Panel Report of the Seventh Session, Abidjan, Côte d'Ivoire, 11-13 November 1998, GOOS Report No. 68, GCOS Report No. 52, ICPO Publication Series No. 26*, 10-11.

1997

Reverdin, G, J. Servain and S. Planton, 1997 : Réseau de mouillages PIRATA dans l'Atlantique tropical. Atelier "Expérimentation et Instrumentation", 29-30 octobre 1997, Auditorium du CNRS, Campus Michel Ange, Paris 16°, 7-12.

Servain J., 1997: The PIRATA program: An extension of the TAO array in the Atlantic. Program Status Report in *TAO Implementation Panel Report of the Fifth Meeting, Goa, India, 18-21 novembre 1996, GCOS Report No. 31, ICPO Publication Series No. 5, GOOS Report No. 97/1*, 15-16.

Servain J., 1997: Pilot Research Moored Array in the Tropical Atlantic. *Annales Geophysicae, Supplement II to Volume 15, PartII, Hydrology, Oceans, Atmosphere & Nonlinear Geophysics*, C 410.

Servain J., H.L. Ayina, and H. Roquet, 1997: Et si PIRATA avait été mis en place dès 1979 ! *Recueil des Actes, Symposium International Surveillance des Océans à l'Horizon 2000 : Une Approche Intégrée, 15-17 octobre 1997, Biarritz, France*, 4 pp.

1996

Servain J., 1996: Le Programme PIRATA (Pilot Research Moored Array in the Tropical Atlantic). *Colloques et Congrès de Météo-France, Atelier de Modélisation de l'Atmosphère, Toulouse, 3-4 décembre 1996, Centre National de Recherches Météorologiques*, 3-8.